Sexuality & Culture
https://doi.org/10.1007/s12119-018-09583-2

ORIGINAL PAPER

"There are Certain Rules that One Must Abide by": Predictors of Mortality in Slasher Films

A. Dana Ménard[1] · Angela Weaver[2] · Christine Cabrera[3]

© Springer Science+Business Media, LLC, part of Springer Nature 2018

Abstract

Slasher films, a popular and lucrative sub-genre of horror movie, are often thought to be characterized by violence, gratuitous sexual content and specific, repetitive tropes; however, although these tropes have been widely discussed and even parodied, there is scant research examining their validity. Thirty top-grossing slasher films (10 each for the 1980s, 1990s and 2000s) were subjected to content analysis at the level of the individual character to examine the factors associated with character deaths or survival. Characters who were shown nude on screen, who dressed in a revealing fashion, who did not engage in fight behaviors against the antagonist and who engaged in fewer types of pro-social behaviors were more likely to be killed. Several common tropes of slasher films (e.g., virgins survive, ethnic minority characters die) were not supported. The implications of these messages of which characters are depicted as "deserving" of survival are discussed in terms of gender, sexual scripts, and agency.

Keywords Media · Content analysis · Slasher film · Sex · Gender role · Just world

Introduction

> There are certain rules you must abide by in order to successfully survive a horror movie. For instance: Number one, you can never have sex. Big no–no, big no–no….Sex equals death, okay? Number two, you can never drink or do drugs. No sin factor. This is sin. It's an extension of number one. Number three, never, never ever under any circumstances do you ever say 'I'll be right

✉ A. Dana Ménard
admenard@uwindsor.ca

[1] Student Counselling Centre, University of Windsor, Windsor, ON, Canada

[2] Department of Psychology, St. Francis Xavier University, Antigonish, NS, Canada

[3] Department of Psychology, University of Guelph-Humber, Guelph, ON, Canada

Published online: 19 December 2018

> back' cause you won't be back. (Jamie Kennedy as Randy Meeks in Scream, Wes Craven, 1996)

Slasher films, a horror sub-genre characterized by graphic violence and suspense-evoking scenes emphasizing victims' fear of an antagonist (Molitor and Sapolsky 1993; Rockoff 2002) have been popular since their beginnings in the 1970s. The Slasher film formula usually depicts a lone male antagonist who systematically picks off a group of young beautiful victims in scenes of graphic violence (Normanton 2012; Rockoff 2002). Slashers are also infamous for their supposed inclusion of gratuitous sexual content and have been pilloried in the press for their portrayals of misogyny (Rieser 2001). Film critic Roger Ebert, noting the rising popularity of slasher films in the early 1980s, commented "These films hate women" (Ebert and Siskel 1980). Slasher films have been described as the "bottom of the horror heap" (Clover 1992, p. 20) or "one notch above pornography" (Craven, as cited in Belofsky et al. 2006).

A popular viewing activity for fans is to predict which characters will die by the end of the movie (e.g., the character is an ethnic minority, the character engages in sexual relations, the character uses drugs). However, few studies have been done on slasher films that could either confirm or disconfirm the truth of these "rules", as well as how often and how widely they apply. The focus of this study was on those characteristics and behaviors that predict the death of slasher film characters in order to determine whether there is empirical support for popular tropes of the genre, whether we could replicate previous research findings, and to extend the scope of research in this area.

History and Popularity of Slasher Films

Black Christmas (1974) is considered by some critics to be the first film to bring together what would become the hallmarks of the slasher film; however, it was the incredible success of *Halloween* (1978), a low-budget, independent horror film, that inspired the subsequent slasher boom. The 1980s are widely thought of as the golden era of slasher films (Bracke 2005). Of the three main slasher franchises, *Halloween* (1978) spawned 10 additional films, *Friday the 13th* (1980) had 11 follow-ups, including one franchise cross-over and one reboot, and the original *Nightmare on Elm Street* (1984) was followed by eight additional films, which included one franchise cross-over and one reboot. The combined gross of these three franchises is currently over $1.5 billion (the-numbers.com). After losing ground in the late 1980s and early 1990s, the sub-genre was revived with the first film of the popular *Scream* franchise, which came out in 1996 and was, until recently, the highest grossing slasher film of all time (boxofficemojo.com). This was followed in the 2000s with a slew of remakes and reboots of the 1970s–1980s slasher films.

Evidence from the box office illustrates the undeniable and enduring popularity of horror films. In 2017, *It*, based on Stephen King's 1986 book, which had already received a film adaptation in 1990, grossed over $700 million worldwide, making it the highest grossing R-rated horror movie of all time. *Get Out*, released in 2017, made $255 million worldwide on a $4.5 million budget and was nominated for four

academy awards, including Best Picture. As this manuscript was being prepared, *Halloween* (2018), the 11th Halloween film, was just released to enormous success, grossing $200 million in its first 2 weeks, the biggest opening for a Halloween franchise film to date.

Popular Cultural Beliefs About Slasher Films

Despite their enormous popularity, there is minimal academic research on the characteristics of slasher films. However, the absence of empirically-derived data has not dissuaded fans from disseminating theories in popular books (e.g., *How to survive a horror movie* [Grahame-Smith 2007]) and on websites (e.g., tvtropes.org). The so-called "rules" of the genre frequently focus on the connection between sexual activity and death, and on the qualities of the characters associated with survival or death. Characters who are ethnic or sexual minority group members, characters who "sin" (e.g., drink, use drugs, steal), and characters who engage in sexual behavior or nudity are often expected to be among the first victims ("Slasher movie" 2017). Many producers, writers and directors of slasher films take for granted that fans are familiar with the "rules" of the sub-genre. Tropes of the genre are so well-known that they have been parodied and played with in successful slasher films and franchises (e.g., *The Cabin in the Woods, Behind the Mask: The Rise of Leslie Vernon*). In *Scream* (Konrad et al. 1996), the character Randy lists some of the most popular beliefs espoused by slasher fans (i.e., the epigraph of this paper).

Tropes are storytelling devices, reoccurring ideas or motifs that provide shortcuts between the storyteller and the audience. They mirror our cultural beliefs, as media is created by writers and directors raised and embedded in the wider social culture, but also contribute to and reinforce our collective understanding of the scripts that guide our social interactions and relationships. Tropes are present in all kinds of media, such as magazines, novels and television (e.g., Aubrey 2004; Ménard and Kleinplatz 2008; Ménard and Cabrera 2011), and are continuously reinforced in varied and sometimes subtle ways. Tropes can explain what thoughts, feelings, attitudes and behaviors are acceptable for men and women—what we are allowed to do, not allowed to do, and why. They may also warn us of the social consequences should we step out of line of these expectations. Slashers may represent an extreme example of social messages (e.g., promiscuous female characters get killed) but coupled with hundreds of other similar messages reinforcing various tenets of traditional sexual scripts, may contribute to the power of these cultural messages, i.e., the idea that promiscuity is a negative attribute for women but a positive one for men (Bordini and Sperb 2013). It is important to examine the rules of the slasher film as they are very popular and widely reviewed, and as trends have illustrated, are very likely to come back in fashion in a cyclical way. They are widely consumed and may have the capacity to influence the attitudes and beliefs of their (predominantly young) audience members (Dexter et al. 1997; Linz et al. 1988).

Research on Slasher Films

Demographic Characteristics and Survival

Although the sub-genre is criticized for being misogynistic, the findings from the few previous studies on violence and gender are mixed. The results from two investigations showed that male characters are more likely to die than female characters (Cowan and O'Brien 1990; Sapolsky et al. 2003) and another study found that male characters were exposed to more serious and graphic acts of violence than female characters (Welsh 2010). However, other studies have shown that female characters suffer through longer death scenes compared to male characters (Weaver 1991; Welsh 2010) and more screen time is devoted to showing female characters in fear (Sapolsky et al. 2003). Given these mixed findings, it is unclear whether slasher films deserve their reputation for misogyny, at least as far as character deaths are concerned.

In addition, despite well-known fan-generated beliefs that characters belonging to ethnic or sexual minority groups are more likely to die, we were unable to find any existing studies that examined the relationship between these characteristics and victimization. This was largely the case for other demographic characteristics (e.g., age, attractiveness, ability/disability status). Although Welsh (2010) measured character qualities such as attractiveness, subsequent analyses were done using a composite measure of these characteristics; therefore, the predictive factor of any specific quality was unclear.

Sexual Activity and Survival

As with the association between character sex and death, findings related to sexual activity in slasher films have also been mixed. Some studies have shown that engaging in sexual behavior (e.g., wearing provocative clothing, initiating sexual contact, appearing nude) is associated with a higher likelihood of mortality, particularly for female characters (Cowan and O'Brien 1990; Welsh 2010). However, other researchers have found no significant association between scenes depicting sexual imagery and scenes depicting violence (Sapolsky et al. 2003). At present, it is unclear to what degree sexual behavior relates to character survival. Also, most studies did not differentiate between sub-categories of sexual behavior, e.g., kissing versus nudity versus intercourse, thus potentially obfuscating important distinctions between major and minor "transgressions".

Other Variables and Survival

Few slasher researchers have collected data on variables other than those associated with sex and sexuality. A recent study focused on the characterization of the "Final Girl" in slasher films (Weaver et al. 2015), a well-known slasher film archetype. Relative to other female characters, Final Girls were more likely to be attractive, were less likely to be shown nude or engaging in significant onscreen sexual behavior, demonstrated more prosocial behaviors as well as more agentic survival-oriented

behaviors against the antagonist, and were more likely to demonstrate an androgynous gender role.

The fact remains that most of the characters in slasher films are not destined to be Final Girls but to serve primarily as foils for the Final Girls (and victims for the antagonist). Therefore, the larger cast of characters may be more important in terms of reinforcing the lessons of slasher films. For example, if five female characters go skinny dipping and are then slowly picked off one-by-one (and the Final Girl, who refuses to swim, survives), the deaths of these characters may be more important with regards to driving home messages to the viewing audience about "worthiness" and survival.

Limitations of Previous Studies

The results from previous studies on slasher films may have been affected by differences in selection criteria, sample size, and coding practices, which may account for inconsistencies in findings. Past researchers have chosen to include a random selection of films from sources such as video outlet catalogs (e.g., Cowan and O'Brien 1990), the Internet Movie Database (e.g., Welsh 2010) or magazines (e.g., Weaver 1991), without a clear rationale for the selection of those particular films or a justification for choosing films randomly rather than purposefully. Many of these studies used small samples of approximately 10 films (e.g., Sapolsky et al. 2003; Weaver 1991) or eliminated sequels from their samples, without a clear justification for this decision (e.g., Weaver 1991). Few studies have looked at changes in the characteristics of these films over time, with the exception of Sapolsky et al. (2003). The coding categories developed by previous researchers sometimes show considerable overlap (e.g., inclusion of both "provocative clothing" and "revealing clothing" by Cowan and O'Brien 1990). Other researchers in this area have chosen significantly different units of analysis, including slasher movie scenes (e.g., Weaver 1991), acts of violence (e.g., Sapolsky et al. 2003) and characters (e.g., Welsh 2010), which severely limits the degree to which their findings may be compared. In some cases, these studies were done over 20 years ago (e.g., Cowan and O'Brien 1990; Weaver 1991) and their findings may not generalize to more recent slasher films. In addition, researchers have focused on a narrow range of variables almost exclusively related to gender and sexual behavior to explain character mortality. Previous research has rarely situated hypotheses in a theoretical context, with the exception of Weaver et al.'s (2015) examination of how slasher films might embody the Just World hypothesis (Ruben and Peplau 1975) as well as the Traditional Sexual Script (Byers 1995).

The Current Study

Slasher films have remained popular with viewing audiences over 40 years after their début in movie theatres. They have generated billions of dollars in revenue and are cheap to film, making them popular with movie producers. They have been seen by millions of viewers, and the average horror audience is more likely to include

young, minority, and female viewers compared to the average movie audience (Lang 2016). Like vampire films and zombie movies, slasher movies come in and out of style (c.f. Beam and Wilson 2009) and are constantly being reinvented for new generations. Most recently, several television shows such as *Scream Queens* and *Bates Motel* have taken the rules of the genre to a new medium and a new audience.

The purpose of this study was to examine the role of demographic characteristics, sexual and gender qualities, agentic behavior and pro/anti-social behavior in predicting character survival, and to determine whether these relationships held true for slashers produced in 1980s, 1990s and 2000s.

Hypotheses

Hypotheses for this study were generated based on findings from previous investigations, relevant theoretical constructs in the fields of sexuality research and psychology, and, in those cases where there was no information available from the first two sources, popular and enduring fan tropes.

Hypothesis 1 (Demographic Characteristics and Survival) Given the contradictory findings from past research regarding character sex, no hypothesis was advanced about the rates of death for male versus female characters. In the absence of previous empirical evidence about the association of demographic characteristics and mortality, popular fan tropes were tested. It was predicted that less attractive characters would be more likely to die than more attractive characters. It was also expected that racial minority characters would be more likely to die than Caucasian characters. These relationships were expected to hold true across all three decades of the study sample.

Hypothesis 2 (Sexual Behavior, Gender and Survival) Based on previous research and the predictions generated by sex script theory, we expected that characters who engaged in more sexually liberal behavior (e.g., demonstrated partial or full nudity, wore revealing fashions and/or engaged in significant sexual behaviors) would be more likely to die compared to characters who were more sexually conservative (e.g., no nudity, conservative style of dress, mild or no sexual behaviors). No hypotheses were stated concerning survival status and character virginity or between survival status and sexual orientation as the results from previous research suggested that this information is rarely explicitly presented in slasher films (Weaver et al. 2015). It was expected that characters embodying an androgynous gender role would be more likely to survive than those exhibited a more narrowly-defined masculine or feminine role (Weaver et al. 2015). It was expected that the correlation between sexual behavior and death would be stronger during more politically conservative periods (i.e., the 1980s and 2000s).

Hypothesis 3 (Character Agency and Survival) Based on previous research on the characteristics of Final Girls (Weaver et al. 2015), it was predicted that less agentic characters (i.e., those who did not engage in fight or flight behaviors in response

to the antagonist) would be more likely to die compared to characters who fought against or fled from the slasher, and this would hold true across all three decades of the study sample.

Hypothesis 4 (Just World Hypothesis and Survival) Based on the tenets of the Just World hypothesis (i.e., that a person's noble actions are rewarded whereas evil actions are punished) (Ruben and Peplau 1975), it was predicted that characters who engaged in a greater variety of anti-social behaviors (e.g., theft, drug use) would be more likely to die than characters who engaged in a greater variety of pro-social behaviors (e.g., apologized, comforted another character); we did not expect this correlation to change over the three decades of the study.

Method

Sample

For the purpose of this study, a slasher film was defined as (Molitor and Sapolsky 1993; Rockoff 2002),

> A commercially-released feature length movie in which a human killer (usually male, acting alone) terrorizes and kills multiple individuals in suspenseful scenes which emphasize the victim's fear, dispatching victims with devices such as knives, hooks, drills, or chainsaws in a variety of violent, graphic and often creative ways.

The 10 highest-grossing films from the 1980s, 1990s and 2000s were selected for inclusion (e.g., Box Office Mojo 2017; see Table 1), resulting in the selection of 30 films for analysis, spanning the years 1980–2009. The goal in selecting high-grossing films for inclusion in the study was to focus on those films that may have reached a greater audience and therefore had a greater potential to impact the attitudes and beliefs of viewers.

Measure

Data for this investigation were collected via a quantitative content analysis of the films (Nuendorf 2002). A coding form and manual were developed based on previous research on slasher films (e.g., Cowan and O'Brien 1990; Sapolsky et al. 2003; Weaver 1991; Welsh 2010) as well as theoretical speculation (e.g., Kerswell 2012; Trencansky 2001; Wee 2006). Additional variables were identified for inclusion based on viewings of slasher films by members of the research team. Variables of interest were defined in the coding manual and refined based on the results of pilot coding, which was performed by research team members using four slasher films from the study sample. Team meetings were regularly held to ensure that all team members understood and agreed on definitions and operationalisations of key

Table 1 Sample of films by decade of release

1980–1989	1990–1999	2000–2009
Friday the 13th (1980)	Child's Play 2 (1990)	Scream 3 (2000)
Halloween 2 (1981)	Freddy's Dead: The Final Nightmare (1991)	Freddy versus Jason (2003)
Friday the 13th: Part 3 (1982)	Candyman (1992)	Texas Chainsaw Massacre (2003)
Psycho 2 (1983)	Scream (1996)	Texas Chainsaw Massacre: The Beginning (2006)
Friday the 13th: The Final Chapter (1984)	I know what you did last Summer (1997)	When a Stranger Calls (2006)
A Nightmare on Elm St (1984)	Scream 2 (1997)	Halloween (2007)
A Nightmare on Elm Street 2: Freddy's Revenge (1985)	Bride of Chucky (1998)	Prom Night (2008)
A Nightmare on Elm Street 3: Dream Warriors (1987)	Halloween H2O (1998)	Friday the 13th (2009)
Child's Play (1988)	I still know what you did last summer (1998)	Halloween 2 (2009)
A Nightmare on Elm Street 4: The Dream Master (1988)	Urban Legend (1998)	My Bloody Valentine (2009)

variables. Each of the 30 films in the sample was randomly assigned to be viewed and coded by two research team members.

Procedure

Primary characters were those featured on screen for a cumulative total of five minutes or more. Primary characters were coded on static demographic variables (e.g., sex, ethnicity, age) sex and gender variables (e.g., style of dress, sexual behaviors, gender role); survival status; demonstrations of agency against the antagonist (i.e., fight behaviors, such as attacking the antagonist or flight behaviors, such running or hiding from the antagonist) or lack of agency (i.e., freeze behaviors, such as fainting); and demonstration of prosocial (e.g., shares, shows sympathy) or antisocial (e.g., drug use, verbal teasing) behaviors. Secondary characters were those featured for only one to five minutes of cumulative screen time; they were coded only on static demographic variables and survival status. Tertiary characters, appearing on screen for less than one minute, were not coded on any of the study variables.

Each of the 30 films in this investigation was coded by two of the researchers, with the goal of achieving perfect agreement. Coding disagreements were resolved by returning to the film, consulting the coding manual or through discussion with the entire team. On occasions that the team could not reach agreement, an outside coder who was blind to the study hypotheses viewed and coded the film in question. Another outside coder, blind to the hypotheses, was asked to code a random selection of three films to ensure that the coding system was reliable. The average percentage agreement among coders was 95%.

Data Analysis

All statistical analyses were conducted with SPSS. In order to compare survivors to non-survivors on categorical dependent measures, Chi square tests of independence were conducted. Fisher's Exact Test was interpreted when appropriate. The SPSS Chi square bootstrap function was used to estimate the indirect effect when sample size was small for some of the analyses. Bias-corrected 95% confidence interval was used based on 1000 bootstrap samples unless otherwise specified (Preacher and Hayes 2004; Shrout and Bolger 2002). Two-tailed *t*-tests and ANOVA analyses were utilized to analyze the continuous variables of prosocial and antisocial behavior.

Results

Sample Characteristics

There were very few sex scenes in these movies. Across the 30 films sampled, there were 10 full sex scenes, six scenes in which sex was heavily implied but not directly shown (e.g., in *A Nightmare on Elm Street*, sexual activity is heard from a neighboring room but not depicted onscreen) and 11 partial or interrupted sex scenes.

Primary Versus Secondary Characters

After removing 14 characters (12 primary, 2 secondary) from analyses because their survival status, our primary dependent variable, was unknown at the conclusion of the film, the final data set included 363 primary and secondary characters. Of the 214 primary characters (115 male, 99 female), 80 survived (37%); of the 149 secondary characters (100 male, 49 female), 73 survived (49%). The difference in survival rate between primary and secondary characters was significant, $X^2(1,363) = 4.86$, $p = .03$, phi = −.116; secondary characters were more likely to survive than primary characters.

Hypothesis 1: Demographic Factors and Survival

There was no significant difference in survival rates between male and female characters overall, $X^2(1,363) = .99$, $p = .32$, phi = −.052, and this did not differ by film decade, $X^2(2,363) = .071$, $p = .641$, phi = .049, meaning that both male and female characters had equal chances for survival across the three decades of our sampled films. There was no difference across the three decades of the study for the death rate of male primary characters, female primary characters, or female secondary characters. However, there was a difference for male secondary characters in their survival rate by film decade, $X^2(2,100) = 7.391$, $p = .025$, $phi = .272$. In films from the 1980s, 30% of male secondary characters died, which rose to 60% in films from the 1990s and 64% in films of the 2000s. There was no significant difference in the likelihood that death would occur onscreen or offscreen based on the sex of the characters, $X^2(1,210) = .862$, $p = .35$, phi = −.06; this did not differ by decade.

It was hypothesized that less attractive characters would be more likely to die than characters rated more attractive and that racial minority characters would be more likely to die than Caucasian characters; we expected that both of these relationships would be true across all three decades of the study sample. No part of this hypothesis was supported. Attractiveness was collapsed into "attractive and "neutral/unattractive" due to low numbers in some groups. Ethnicity was similarly collapsed into Caucasian versus visible minority characters due to low numbers of racially diverse characters. Analyzing all three decades together, attractiveness did not predict survival ($p = .452$, Fisher's exact test) and this relationship did not change over time, $X^2(2,363) = 1.609$, $p = .447$, phi = .067. Similarly, ethnicity did not predict survival, ($p = .745$, Fisher's Exact Test) and this relationship did not change across the three decades of films sampled $X^2(2,363) = 5.64$, $p = .06$, phi = .125.

Hypothesis 2: Sexual Behavior/Characteristics and Survival

It was hypothesized that characters who engaged in more sexually liberal behavior would be more likely to die compared to characters who were more sexually

Table 2 Sexual behaviors of primary characters by film decade

	1980s (%)	1990s (%)	2000s (%)
Nudity			
None/implied	75.0	96.9	81.1
Full/partial	25.0	3.1	18.9
Clothing style			
Revealing	6.6	9.4	18.9
Neutral/conservative	93.4	90.6	81.1
Sexual behaviors			
None/implied	77.0	57.1	61.1
Mild/major	23.0	42.9	38.9
Virginity			
Virgin	0	1.6	1.4
Non-virgin	31.5	24.2	23.6
Unknown	68.5	74.2	75.0
Sexual orientation			
Implied heterosexual	60.3	72.6	76.4
Unknown	38.4	25.8	23.6
Implied LGBT	< 1	< 1	< 1

conservative (see Table 2). It was expected that the relationship between sexual behavior and death would be stronger during more politically conservative periods (i.e., the 1980s and the 2000s).

Some categories had unacceptably low numbers; therefore, nudity was collapsed into those characters who did not appear nude or where there was only implied nudity versus those who were depicted partially or fully nude onscreen. These groupings were chosen in order to reflect the impact of characterization in the eyes of spectators, i.e., the male gaze (Mulvey 1975). Characters who disrobe "in front of" the camera (e.g., the characters who go skinny dipping in *Friday the 13th Part 4*) might be seen as more sexually liberal (and therefore promiscuous) by the audience than characters who are more purposeful and selective in their choice to disrobe (e.g., in the movie *Scream*, Sidney flashes her breasts but only to her boyfriend and the viewer sees only her back).

Analyzing all three decades together, characters who did not appear nude onscreen or for whom nudity was implied were more likely to survive than characters who were shown nude onscreen ($p < .001$, Fisher's Exact Test). Of the characters who were shown fully or partially nude onscreen ($n = 35$), 100% died and none survived, whereas for the characters who were not shown nude onscreen or where nudity was only implied but not directly depicted ($n = 179$), 55% died. There was significant variation in the likelihood of characters appearing nude onscreen across the three decades of the study, $X^2(2,214) = 12.696$, $p = .002$, phi = .244. A greater proportion of characters were depicted nude in the 1980s (25%) and the 2000s (19%) compared to the 1990s (3%). The relationship between nudity and death was true both for 1980s characters ($p < .001$, Fisher's Exact Test) and for 2000s characters ($p = .003$, Fisher's Exact Test). In the 1990s,

so few characters were depicted nude that it was not possible to analyze (however, we can note that the two characters who were shown partially nude both died).

Categories for style of dress were collapsed into those characters who wore neutral or conservative fashions versus those who appeared in revealing or "rebellious" styles. Analyzing all three decades together, characters who wore neutral/conservative clothing were more likely to survive ($p = .001$, Fisher's Exact Test). Of characters who appeared in revealing/rebellious fashions, 92% were killed, compared to just 59% of characters who wore conservative or neutral clothing. There was no relationship between dress style and survival for characters in 1990s slasher films ($p = .673$, Fisher's Exact Test). However, dress style predicted survival for 2000s characters ($p = .003$, Fisher's Exact Test). In the 1980s, too few characters wore revealing/rebellious clothing to provide results to analyze.

Sexual activity was coded into two groups: characters who demonstrated no sexual behaviors and those for whom sexual behavior was only implied but not shown onscreen versus those who engaged in mild (e.g., kissing) or major sexual behaviors (e.g., intercourse). (Again, these categories were chosen to reflect the gaze of the viewing audience). Analyzing all three decades together, there was no relationship between engagement in sexual behaviors and death ($p = 1.00$, Fisher's Exact Test). Unfortunately, due to low base rates for sexual behaviors, it was not possible to test the difference between characters who engaged in mild versus those who engaged in significant sexual behaviors. However, we can note that of the 17 characters who engaged in significant sexual behaviors, 16 were killed [94%] whereas of the 55 characters who engaged in mild sexual behaviors, only 35 were killed [64%]. A greater percentage of characters were depicted engaging in sexual behavior in the 1990s (47%) compared to the 1980s (21%) or 2000s (32%), $X^2(2,192) = 9.633$, $p = .008$, phi = .224.

It was hypothesized that embodying an androgynous gender role would be associated with character survival. This hypothesis was supported, $X^2(2,170) = 7.619$, $p = .022$, phi = .212; however, there was significant variation in this association across the three decades of the study, $X^2(2,170) = 6.719$, $p = .035$, phi = .199. Survival rates did not differ by gender role for characters in films released in the 1980s or the 2000s, but there was a significant association in the 1990s, $X^2(2,57) = 6.542$, $p = .038$, phi = .339. Characters in slasher films of the 1990s who embodied an androgynous gender role were more likely to survive.

No hypotheses were stated concerning survival status and character virginity or between survival status and sexual orientation. Once characters with unknown virginity status were excluded, analyses could not be run due to insufficient sample size. Out of 214 primary characters, only two characters were explicitly identified as virgins: Randy from *Scream* and Lori Campbell from *Freddy versus Jason.* Both survived their respective films (although Randy did not survive the film sequels). Similarly, once characters for whom sexual orientation was unknown were excluded, analyses could not be run due to insufficient sample size. Again, only two characters were explicitly or implicitly depicted as sexual minorities and both characters died (David from *Bride of Chucky* and Coacher Schneider from *Nightmare on Elm Street 2*).

Hypothesis 3: Agency and Survival

It was hypothesized that less agentic characters would be more likely to die compared to characters who fight against or flee from the antagonist, and that these predictions would hold true across all three decades (see Table 3). Analyzing all three decades together, there was no association between survival and freezing behaviors ($p = .119$, Fisher's Exact Test), or between survival and flight ($p = .158$, Fisher's Exact Test) but there was a significant relationship between survival and fighting behaviors ($p < .001$, Fisher's Exact Test). Both male and female characters who exhibited fight behaviors were more likely to survive; this was true across all three decades of the study. Further, employing multiple strategies conferred a survival advantage: 62.9% of those who used all three responses (i.e., fight *and* flight *and* freeze) survived versus 29.4% of characters who used only one type of behavior (i.e., fight *or* flight *or* freeze).

Hypothesis 4: The Just World Hypothesis and Survival

It was hypothesized that characters who demonstrated a greater variety of anti-social behaviors would be more likely to die than characters who showed more types of pro-social behaviors. This hypothesis was partially supported. Analyzing the three decades of the sample together, the results of a *t* test showed that characters who exhibited a greater variety of pro-social behaviors were more likely to survive, $t(143) = 3.82$, $p < .001$, which held true across films of the 1980s, 1990s and 2000s.

Overall, there was no relationship between greater variety of anti-social behaviors demonstrated by a character and death, $t(213) = -1.41$, $p = 1.67$. Analyzing each decade individually, there was no relationship between anti-social behaviors and survival in the 1980s, $t(74) = -1.86$, $p = .07$, or the 1990s, $t(63) = .810$, $p = .421$. However, slasher film characters who engaged in more types of anti-social behavior in 2000s were more likely to die, $t(72) = -2.178$, $p = .033$. Characters in this decade were both more likely to be rewarded for engaging in good behavior *and* punished for engaging in bad behavior.

Table 3 Percentage of primary characters demonstrating agentic behaviors by film decade

	1980s Survivors	victims (%)	1990s Survivors	victims (%)	2000s Survivors	victims (%)
Fight	56	23.5	67.7	30.3	66.7	26
Flight	40	21.6	54.8	48.5	62.5	60
Freeze	40	35.3	32.3	54.5	41.7	58

Discussion

The purpose of the current study was to identify variables associated with character survival in slasher films. Although tropes of these films are frequently discussed in academic and popular literature, and parodied in films, there has been little empirical research and contradictory findings in previous studies (e.g., whether gender predicts death). Existing research has also been quite limited in scope. In the current study, primary characters were more likely to survive a slasher film if they wore neutral/conservative clothing, fought back against the antagonist, embodied an androgynous gender role (1990s only) and/or engaged in a greater variety of pro-social behaviors. Primary characters were more likely to die if they appeared fully or partially nude and/or engaged in a greater variety of anti-social behaviors (2000s only). Characteristics *not* associated with survival/death include: gender, attractiveness, ethnicity, sexual orientation and virginity status. As well, characters who engaged in sexual behavior (mild, major or implied), demonstrated anti-social behaviors (1980s and 1990s) and who froze or fled in the face of an attack were no more likely to die than characters who did not.

It should be noted that many of the variables that were included in the analysis showed very low base rates making it impossible to run statistical analyses. However, in these cases, results were still interesting and noteworthy. For example, both characters identified as virgins survived their films while both characters identified or implied to be sexual minorities died. Similarly, almost all of the characters who engaged in significant sexual behaviors died (94.1%) but far fewer of those who engaged in mild sexual behaviors were similarly punished (63.6%). These findings are certainly suggestive and further studies with a larger sample of films are indicated.

These results both support and contradict previous findings on the characteristics of "Final Girls" (Weaver et al. 2015). Both Final Girls and surviving primary characters in slasher films are more likely to demonstrate a greater variety of prosocial behaviors as well as agentic survival-oriented behaviors, were more likely to embody an androgynous gender role and were less likely to appear nude onscreen. However, Final Girls were also more likely to be attractive and to demonstrate a greater variety of anti-social behaviors, and surviving primary characters were more likely to wear neutral/conservative clothing. It would appear that the "rules" may actually be stricter for surviving primary characters than they are for Final Girls, in that certain behaviors are permitted for Final Girls that are not acceptable for other characters (e.g., engaging in anti-social behaviors) and that primary characters have to toe a stricter line (e.g., dress style). Final Girls may also get more screen time than even other primary characters and are thus afforded the opportunity to demonstrate a greater range of behaviors and to be represented in more complex ways.

It is interesting to note that these films are significantly less sexy than their reputations would suggest. Across 30 films, there were only 10 full sex scenes; this suggests that slasher films actually feature fewer sex scenes than the average

comedy film or drama (Bufkin and Eschholz 2000). These results do corroborate finding by Sapolsky et al. (2003), who found that sex and violence were rarely linked in these movies, presumably because there are many more violent behaviors per film compared to sexual behaviors.

Why then do these films have such a reputation for raciness? It is possible that a few prominent sex scenes, especially those associated with a violent end for the characters, are more easily recalled (e.g., *Friday the 13th* Part 2 featured a couple who are killed *in media res*). It is also possible that a larger and broader sample of slasher films might have included more sexual content. Further, the films in this sample consisted primarily of films from well-known and popular slasher franchises (22 of the 30 films were sequels or remakes). Whereas these popular films may be able to generate ticket revenue based on their reputation and familiarity, independent slashers may need more of a rating boost from racier content. Certainly the findings in this study hinted at a connection between sexual behavior and death, although these results did not reach statistical significance.

Demographic Predictors of Survival

Static demographic characteristics such as attractiveness and ethnicity were *not* associated with death in slasher films across all three decades of the films. This may be due to sample homogeneity: The vast majority of primary characters were attractive (74.8%) and Caucasian (87.9%). However, despite the lack of empirical basis for the belief, many slasher films fans are familiar with the trope of "the black guy dies first." Although no other studies to our knowledge have investigated the connection between ethnicity and character death, our findings corroborate some non-academic research showing that in a sample of 50 horror movies, only five movies featured a Black character who died first (Barone 2013). It may be possible that a few salient examples of characters of color being killed were enough to cement this idea in slasher fans' minds (e.g., when Phil and Maureen are killed in the cold open of *Scream 2*). It may also be possible that a greater number of tertiary characters (i.e., onscreen for less than a minute) are ethnic minorities; although their screen time precludes character development, race might be immediately discernible to viewers and the connection to death is established. There are also many examples of non-horror films where minority characters are killed early in the film (e.g., Frost in *Aliens*); viewers may simply be transposing this expectation to slasher films.

The results of this study showed no gender difference in survival rates, supporting some previous research (e.g., Cowan and O'Brien 1990; Weaver 1991), but contradicting other studies as well as popular beliefs. Sapolsky et al. (2003) found that males were more often victims of violence than females in 1990s slasher films. However, this difference may be due to the unit of analysis; whereas the current investigation coded variables at the level of the character, Sapolsky et al. coded "acts of violence", and included potentially non-fatal acts in this definition (e.g., choking, kicking). It is plausible that male characters die at the same rate as female characters but suffer more violent acts prior to death. In our research, female characters were *not* more likely to be killed onscreen compared to male characters, which

may contradict research findings suggesting that female characters are treated more harshly and punished more severely (e.g., Sapolsky et al. 2003; Welsh 2010). Our study did not examine other variables linked to death that might contribute to representations of misogyny in these films (e.g., time shown in fear for male versus female characters, methods of character death). Anecdotally, we could point to discrepancies between the ways in which male characters are killed compared to female characters which are certainly suggestive of further research (e.g., in *My Bloody Valentine 3D*, Frank the trucker is dispatched very quickly and without even seeing his attacker whereas Irene, his sexual partner, is chased fully nude across parking lot and tortured at length in a motel room by the slasher wielding a pickaxe). It is also possible that misogyny in these films may not be linked to death but to other approaches to representation in the film (e.g., demonstrations of intelligence by male vs. female characters). Results of our study suggest that female characters in general are underrepresented in the population of these films: there were twice as many male secondary characters as there were female secondary characters (100 vs. 49). This finding is in line with previous research showing that in of the top 100 grossing films in 2009, the last year included in our study, female characters represented only 32.8% of speaking characters (Smith et al. 2017).

Sexual Predictors of Survival

With regards to sex and sexuality, the only behavior that was consistently associated with death for characters in slasher films was being seen partially or fully nude; by the same token, dressing in conservative or neutral fashions was associated with survival. Surprisingly, engaging in sexual behavior, virginity status, and sexual orientation were not associated with survival. The lack of significant association between sexual behaviors and death supports the findings of Sapolsky et al. (2003), but stands in contrast to those of Cowan and O'Brien (1990), who found that victims were more likely to be engaged in sexual activity prior to an attack and that nonsurviving females were more sexual than both surviving females and nonsurviving males. These findings also contradict those of Welsh (2010), who found that female characters who did not engage in sexual activity were more likely to survive. This difference may be accounted for in terms of sampling method: both Cowan and O'Brien (1990) and Welsh (2010) selected their films in random fashion whereas the present investigation used a more purposeful approach in order to focus on films that might have the greatest influence.

A caveat to these findings is that some categories (i.e., virginity, sexual orientation) included so few cases that it was impossible to conduct analyses and the low base rates in other categories (e.g., significant sexual activity) might have left other analyses underpowered. However, given the large size of the sample that was collected (214 primary characters from 30 films), these results appear to be an accurate reflection of the genre, insofar as virginity status and sexual orientation are rarely explicitly stated in these films. Of note, the only two characters in our sample clearly identified as sexual minorities were killed, and the only two characters clearly identified as virgins both survived their respective films. Certainly, it is noteworthy that

the percentage of characters who explicitly identify as sexual minority group members is significantly below the population average but again, the non-representation of sexual minorities is completely consistent with previous findings related to the absence of LGBT characters in other films (Smith et al. 2017).

If sexual behavior and virginity are not associated with slasher film survival, why is the trope so well-known? It may be true that a few prominent examples have captivated slasher fans' imaginations (e.g., Laurie Strode from the original *Halloween* who is presented as less experienced than her best friends). It may also be a case of the halo effect in operation, i.e., the cognitive bias that causes an impression created in one area to influence opinion in another area. Characters who do not engage in sexual or anti-social behaviors (e.g., drug use) and who wear neutral or conservative clothing are assumed to be virgins, even though this may not be stated clearly.

Some of our findings in this study seem to support a conservative approach to sex and sexuality in these films. Characters who appeared fully or partially nude were more likely to die, characters who dressed conservatively were more likely to survive, and there was so little in the way of sexual activity that there was no correlation between engagement in sexual behavior and death. Some findings were suggestive of the idea that significant sexual behaviors such as intercourse would be punished severely (94% of characters who engaged in such behaviors died) but mild sexual behaviors might be more acceptable (64% death rate). This corroborates previous results by Weaver et al. (2015), who found that Final Girls were "permitted" to engage in mild but not significant sexual behaviors. These films allow characters to be sexy, but not too sexy. Given recent social changes that may impact predominant sexual scripts (e.g., the advent of dating apps, legalization of gay marriage in the United States), further research should continue to examine representations of sex and sexuality in these films; it would be interesting to see if these films become more liberal (and find other reasons to punish characters) or continue to punish characters for seemingly-minor transgressions. It would also be interesting to investigation the connections between sex, sexuality and character death in other horror subgenres (e.g., torture porn, zombie films, paranormal horror).

Agentic Predictors of Survival

Across the entire sample, characters who exhibited fight behaviors were more likely to survive but there was no relationship between freezing or fleeing and survival; thus, slasher films reward agentic behaviors. This might be tautological (e.g., fighting back increases the odds of survival); however, many of these characters do not kill the antagonist, as this is often reserved for the Final Girl. It appears that any form of counter-attack is rewarded.

A limitation in these analyses was the use of categorical coding for this category, such that characters were categorized as "fighting" if they threw one punch or if they found a weapon and engaged in a coordinated counter-attack alongside other characters. It is possible that freezing is not associated with death because characters often freeze as a first response, but then run away or fight back. It may be that only sustained freezing is associated with death.

"Just World" Predictors of Survival

Overall, characters who exhibited a greater variety of pro-social behaviors were more likely to survive. Characters who exhibited a greater variety of anti-social behaviors were no more likely to die compared to other characters in the 1980s or 1990s but were more likely to die in the 2000s. These findings partly support the Just World hypothesis in that characters who were pro-social were rewarded with survival. It may be interesting in future research to examine more broadly and deeply the nature of slasher characters' anti-social behaviors: Certain types of behavior may matter more than others (e.g., stealing is punished more harshly than lying).

Strengths and Limitations

A limitation of the current investigation was the lack of data on secondary and tertiary characters. However, it is difficult to identify extensive character data from five minutes or less of screentime. These characters may serve as "trope reinforcers": For instance, a character shown using drugs is quickly killed and the trope is supported. Another limitation involved the categorical nature of the coding in this investigation. For example, it was not possible to do a more fine-grained analysis with regards to the fight/fright/freeze responses. In many cases, characters were observed to engage in a kind of behavioral chain (e.g., an initial response of freezing, followed by running, hiding, briefly fighting back and then more running), which was not captured statistically.

This study demonstrated numerous strengths, including the use of character-level coding, which allows for a "real-world" applicability of findings. A character's qualities and behaviors were directly associated with his or her fate, leaving them to be either role models or warnings (and rarely anything in between). The use of top-grossing films also brought the focus to films that had reached a large audience and therefore might have had strong potential to influence a large group of people. This study was also one of the first to look at predictors of survival and death other than sexual behavior.

Future research in this area might consider whether these predictors hold true for other sub-genres of horror, such as supernatural, zombie, torture porn, or horror-comedy. Horror movie sub-types go in and out of fashion, and so we can expect that slasher films will continue to have periods of popularity. Specifics might change but will the message? It might also be valuable to examine why slasher fans like these films, how they understand them, and whether regular consumption affects their beliefs about gender, sex and violence.

Acknowledgements We would like to thank Angela Taylor for her assistance in data collection.

Compliance with Ethical Standards

Conflict of interest A. Dana Ménard, Angela Weaver and Christine Cabrera declare that they have no conflict of interest.

Ethical Approval This article does not contain any studies with human participants or animals performed by any of the authors.

References

Aubrey, J. S. (2004). Sex and punishment: An examination of sexual consequences and the sexual double standard in teen programming. *Sex Roles, 50,* 505–514. https://doi.org/10.1023/B:SERS.0000023070.87195.07.

Barone, M. (2013). *Fact check: Do Black characters always die first in horror movies?* Retrieved October 17, 2018 from https://www.complex.com/pop-culture/2013/10/black-characters-horror-movies/.

Beam, C., & Wilson, C. (2009). The garlic years. *Slate*. Retrieved June 24, 2017 from http://www.slate.com/articles/news_and_politics/recycled/2009/11/the_garlic_years.html.

Belofsky, R., Scalese, R. (Producers), & McQueen, J. (Director). (2006). *Going to pieces: The rise and fall of the slasher film* [Motion Picture]. Starz Entertainment.

Bordini, G. S., & Sperb, T. M. (2013). Sexual double standard: A review of the literature between 2001 and 2010. *Sexuality and Culture, 17,* 686–704. https://doi.org/10.1007/s12119-012-9163-0.

Box Office Mojo. (2017). Retrieved from http://www.boxofficemojo.com/genres/chart/?id=slasher.htm.

Bracke, P. M. (2005). *Crystal Lake memories: The complete history of Friday the 13th*. London: Titan Books.

Bufkin, J., & Eschholz, S. (2000). Images of sex and rape: A content analysis of popular film. *Violence Against Women, 6,* 1317–1344. https://doi.org/10.1177/1077801200006012002.

Byers, E. S. (1995). How well does the traditional sexual script explain sexual coercion? Review of a program of research. *Journal of Psychology and Human Sexuality, 8,* 7–25. https://doi.org/10.1300/J056v08n01_02.

Clover, C. J. (1992). *Men, women, and chainsaws: Gender in the modern horror film*. Princeton, NJ: Princeton University Press.

Cowan, G., & O'Brien, M. (1990). Gender and survival vs. death in slasher films: A content analysis. *Sex Roles, 23,* 187–196. https://doi.org/10.1007/BF00289865.

Dexter, H. R., Penrod, S., Linz, D., & Saunders, D. (1997). Attributing responsibility to female victims after exposure to sexually violent films. *Journal of Applied Social Psychology, 27,* 2149–2171. https://doi.org/10.1111/j.1559-1816.1997.tb01645.x.

Ebert, R., & Siskel, G. (Writers.) (1980). Women in danger [Television series episode]. In T. Flaum (Producer), *Sneak previews*. Chicago: PBS.

Grahame-Smith, S. (2007). *How to survive a horror movie*. Philadelphia, PA: Quirk Books.

Kerswell, J. A. (2012). *The slasher movie book*. Chicago, IL: Chicago Review Press Inc.

Konrad, C., & Woods, C. (Producers), & Craven, W. (Director). (1996). *Scream.* [Motion Picture]. Dimension Films.

Lang, B. (2016). *Horror movies make tough times less scary for studies*. Retried from https://variety.com/2016/film/news/horror-movies-1201900551.

Linz, D. G., Donnerstein, E., & Penrod, S. (1988). Effects of long-term exposure to violent and sexually degrading depictions of women. *Journal of Personality and Social Psychology, 55,* 758–768. https://doi.org/10.1037/0022-3514.55.5.758.

Ménard, A. D., & Cabrera, C. (2011). 'Whatever the approach, Tab B still fits into Slot A': Twenty years of sex scripts in romance novels. *Sexuality and Culture, 15,* 240–255. https://doi.org/10.1007/s12119-011-9092-3.

Ménard, A. D., & Kleinplatz, P. K. (2008). 21 moves guaranteed to make his thighs go up in flames: Depictions of "great sex" in popular magazines. *Sexuality and Culture, 12,* 1–20. https://doi.org/10.1007/s12119-007-9013-7.

Molitor, F., & Sapolsky, B. S. (1993). Sex, violence, and victimization in slasher films. *Journal of Broadcasting and Electronic Media, 37,* 233–242. https://doi.org/10.1080/08838159309364218.

Normanton, P. (2012). *The mammoth book of slasher movies: An A–Z guide to more than 60 years of blood and guts*. London: Constable & Robinson Ltd.

Nuendorf, K. A. (2002). *The content analysis guidebook*. Thousand Oaks, CA: Sage.

Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers, 36,* 717–731. https://doi.org/10.3758/BF03206553.

Rieser, K. (2001). Masculinity and monstrosity: Characterization and identification in slasher films. *Men and Masculinities, 3,* 370–392. https://doi.org/10.1177/1097184X01003004002.

Rockoff, A. (2002). *Going to pieces: The rise and fall of the slasher film, 1978–1986*. Jefferson, NC: McFarland & Company Publishing.

Ruben, Z., & Peplau, L. A. (1975). Who believes in a just world? *Journal of Social Issues, 31,* 65–89. https://doi.org/10.1111/j.1540-4560.1975.tb00997.x.

Sapolsky, B. S., Molitor, F., & Luque, S. (2003). Sex and violence in slasher films: Re-examining the assumptions. *Journalism and Mass Communication Quarterly, 80,* 28–38. https://doi.org/10.1177/107769900308000103.

Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods, 7,* 422–445. https://doi.org/10.1037//1082-989X.7.4.422.

Slasher Movie. (2017). Retrieved February 3, 2017 from https://www.tvtropes.org/pmwiki/pmwiki.php/Main/SlasherMovie.

Smith, S. L., Pieper, K., & Choueiti, M. (2017). Inclusion in the director's chair? Gender, race, & age of film directors across 1,000 films from 2007–2016. *Media, Diversity, & Social Change Initiative*. Retrieved from https://annenberg.usc.edu/sites/default/files/2017/04/06/MDSCI_Inclusion%20_in_the_Directors_Chair.pdf.

Trencansky, S. (2001). Final girls and terrible youth: Transgression in 1980s slasher horror. *Journal of Popular Film and Television, 29,* 63–73. https://doi.org/10.1080/01956050109601010.

Weaver, J. B. (1991). Are "Slasher" horror films sexually violent? A content analysis. *Journal of Broadcasting and Electronic Media, 35,* 385–392. https://doi.org/10.1080/08838159109364133.

Weaver, A., Ménard, A. D., Cabrera, C., & Taylor, A. (2015). Embodying the moral code? Thirty years of final girls in slasher films. *Psychology of Popular Media Culture, 4*(1), 31–46. https://doi.org/10.1037/ppm0000006.

Wee, V. (2006). Resurrecting and updating the teen slasher: The case of scream. *Journal of Popular Film and Television, 34,* 50–61. https://doi.org/10.3200/JPFT.34.2.50-61.

Welsh, A. (2010). On the perils of living dangerously in the slasher horror film: Gender differences in the association between sexual activity and survival. *Sex Roles, 62,* 762–773. https://doi.org/10.1007/s11199-010-9762-x.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.